

Case Study: Advanced Building Automation

Jameson Ave, Toronto

Project Overview

Multi-residential building with 78 units
Completed December 2014

Low-cost mechanical upgrades:

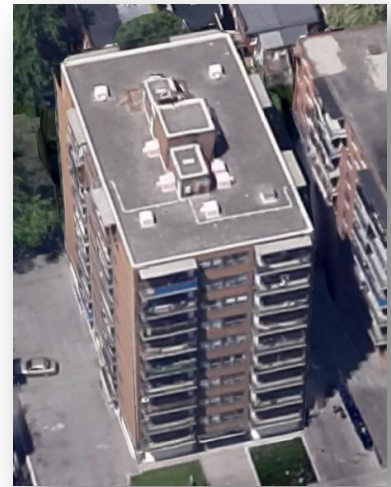
- Added boiler protection valves
- Created primary-secondary system
- Reduced wear to boilers
- Reduced energy output to building

Advanced building automation system & sensors:

- Installed web-accessible automation system
- Intelligent boiler control algorithms
- Temperature sensors in suites and garage
- Snow sensor to control snowmelt system

Interval Data Optimization and Performance Surveillance:

- Tracking energy use every day, every hour
- Using performance feedback to optimize energy output
- Eliminating energy waste and maximizing results



Project Results

Natural Gas Savings: **50,000 m³ per year (36%)**

Reduction in Utility Costs: **\$15,000 per year**

Project Cost: **\$22,100**

Return on Investment: **1.5 year payback period**

Additional Benefits:

- Improved resident comfort and reduced overheating
- Reduced staff maintenance and workload
- Ongoing *Performance Surveillance* to protect savings

